Deception may be as old as the hills, but if you think it all started with Adam, Eve and a serpent, you’re deceiving yourself, says Ursula W. Goodenough, Ph.D., professor of biology. So, just how long has this been going on? “Deception between species—probably has been around since the first predator/prey relationships were established, and it continues today in particularly active forms in the war being waged between the eukaryotic immune system and microbial pathogens (viruses or bacteria),” says Goodenough. “These pathogens existant have not been eliminated by immune systems. Numerous pathogens operate by deception. Given enough evolutionary time, the immunological armamentarium might well catch up with some defenses to thwart them, but meanwhile we must understand their deceptive ways and figure out how to outsmart them.”

Deception occurs throughout nature and transcends species, says Goodenough. Whether a cheating heart or a lying molecule, the concept is similar in many ways. The biologist says cells, like humans, are capable of the White Lie, the Black Lie and the Big Lie, although cells are much less scheming than humans in their manners of deception. As Robert Susman, Ph.D., professor of anthropology and a noted primatologist who has found, humans are the only species capable of self-deception. “All animals are able to think and many can use tools. What sets humans apart is our ability to deceive.”

Cellular deceit

In the paper she presented, Goodenough says that the basic paradigm, or example, of molecular deception is the parasitic relationship of viruses and their hosts. “A White Lie occurs when a pathogen invades a cell, replicates itself and departs the host, leaving it none the worse off,” she says. “The Black Lie parasite deceives a cell and kills it. The Big Lie occurs repeatedly at the cellular level in symbiosis, the mutually beneficial life pact between two dissimilar organisms. This Big Lie starts out as an enormous deception,” Goodenough says, “but, on a larger scale, deceptions throughout our culture and in nature operate much like viruses.”

Deception at the molecular level, reminds Goodenough, in an adaptive process. “Unlike the notion of Satan deceiving humans into sin, molecular deception is not inherently evil,” she says. “But, on a larger scale, deceptions throughout our culture and in nature operate much like viruses.”

In the paper she presented, Goodenough cites three major types of molecular deceptions: those that use deception techniques to bind to the host receptor cells; those that hide from the immune system; and those that switch antigens, or surface-displaying proteins, to confuse the immune system.

Deception in primates

Susman, co-director of the Beza Mahafaly Reserve in Madagascar, and graduate student Bartlett reviewed the deceptive strategies of primates and compared them to those of other species, including humans. “In the fossil record, the tools of Homo Erectus show very little variability. Then all of a sudden you get variations on tools, burials, effigies, art—things with no practical use. It is the first time you can say humans are symbolizing. I say that at this point you get self-deception—they are creating worlds that don’t exist.”

All species deceive, Susman and his colleagues note. The moth that perfectly mimics a glistening leaf uses a genetically determined deceptive strategy to hide on the limbs of a tree. And the chimpanzee that leads its peers away from a hidden cache of food also weaves that tangled web we know as deception.

But, at what point does deception cease to be morphological, or involuntary, as in the case of the moth, and begin to become voluntary and conscious, as in the case of the chimpanzee? Is the ability to consciously deceive a function of intelligence?
Deception

There is a distinction between deception and lying. The latter is a conscious act of concealing facts, while the former involves a more complex interaction of factors. This article explores the nature of deception and its evolution.

The role of deception in human behavior is significant. It allows individuals to manipulate reality, to shape perceptions, and to control the minds of others. Deception is a potent tool in human communication, used to achieve a wide range of objectives.

Deception can be categorized into two main types: voluntary and involuntary. Voluntary deception is a conscious act, while involuntary deception occurs without the individual's awareness. In both cases, the intent of the deceiver is to mislead or misrepresent the truth.

Deception is not unique to humans; it is found in many species, including animals. Deception in animals can be driven by the desire to protect oneself or to gain advantage over others. It can also be a response to evolutionary pressures, such as the need to escape predators or to attract mates.

The evolution of deception in primates is a topic of interest among scientists. Researchers have observed that primates use a variety of strategies to mislead others. These strategies can range from simple visual cues to complex communicative displays.

Deception is a complex behavior that involves cognition, communication, and perception. It is a key factor in the development of social structures and the evolution of intelligence. Understanding the role of deception in human and animal behavior is crucial for our understanding of the evolution of intelligence and the nature of consciousness.
NOTABLES

David Felix, Ph.D., professor emeri- tus of economics, has received a J. William Fulbright travel and research grant for a visit to Argentina, Brazil and Chile from March 25 to June 25.

Anni E. Geers, Ph.D., associate professor in the Department of Speech and Hearing at the Central Institute for the Deaf, presented a lecture titled "Language and Literacy in Oral Adolescents," during a meeting of the Illinois Association of the Deaf impaired in Chicago. She also participated in the Lansing, Michigan, to update the National Strategic Plan of the National Institute of Deafness and Other Communication Disorders of the National Institutes of Health.

Kevin Herbert, Ph.D., professor and chair of the Department of Classics, presented a paper titled "Classical Themes in Modern Art: From J. L. David to the Present," at the inaugural meeting of the Society for the Classical Tradition, held last month in Boston. He is a member of the Harvard board of the society, which already lists enrollments from 26 nations. As curator of the Wulfing Coin Collection, Herbert also is responsible for the exhibit "Roman Republican Coins" displayed May 19 at the University's Gallery of Art.

Harry Knopy, M.D., associate professor of clinical ophthalmology and visual science, has had his paper "Research (Vaccine) Induced Retinal Injuries" accepted for publication in the May issue of the Annals of Ophthalmology.

Carol Maxwell, a doctoral student in anthropology, presented a paper, titled "Psychological Metaphors in Pro-Life Rhetoric and Performances," at the Fifth Annual Midwest Conference on Communication Disorders Conference, held at Northwestern University.

Paul L. Molina, M.D., assistant professor of radiology at the Mallinckrodt Institute of Radiology, presented a lecture at the 12th annual International Imaging Conference in Steamboat Springs, Colo. The lecture was sponsored by the Medical College of Wisconsin.

W. Michael Mudrovic, Ph.D., assistant professor of Spanish, presented a paper, titled "The Emperor: Historical, Political, Religious Metaphors in Pro-Life Rhetoric and Performances," at the Fifth Annual Midwest Conference on Communication Disorders Conference, held at Northwestern University.

Martin S. Silverman, Ph.D., research assistant professor of physiology in the Department of Speech and Hearing at the Central Institute for the Deaf, will present a paper and serve as a session chair for the American Association for Research in Vision and Ophthalmology meeting April 27-May 3 in Sarasota, Fla. Silverman's paper is titled "Restoration of the Papillary Reflex by Photoconductor Transplantation."

Arlene Stiffman, Ph.D., assistant professor of psychology, has been appointed chief editorial adviser for the publication "The American Psychologist." She is a member of the Department of Psychology.

Murray W. L. Wax, Ph.D., professor of sociology and anthropology, presented a paper, titled "Dachau," at the Fifth Annual Midwest Conference on Communication Disorders Conference, held at Northwestern University.

Have you done something noteworthy?

If you have presented a paper at a professional meeting or have accepted an offer of a professional position! The Washington University Record will help spread the good news. Contributions regarding new appointments, promotions or faculty and staff scholarly or professional activities may be sent to Personals, Campus Box 1070, or by electronic mail to tsp24@wumc. Please include a phone number.

Schwarz honored for contributions to Austria's culture and literature

Egon Schwarz, Ph.D., Rosa May Distinquished University Professor in the Humanities, has received the Ehrenzeichen for Kunst und Wissenschaft (Budge of Honor for Art and Science) from the Austrian government in recognition of his contributions to Austrian art and literature. He received the award from Clemens Korrel, the Austrian consul general in Chicago, during a March 4 ceremony in the Women's Building lounge.

Schwarz has been a member of the Washington University faculty since 1961. Among his numerous publications are works on Austrian and German writers of the 18th and 19th centuries. His 1979 autobiography titled "No Time for Eichendorff," is a tribute to the intellectual development of a generation that was driven from its homeland and established personal lives and careers in a foreign country.

Since the end of World War II, he has frequently traveled to Austria as a guest of the country's cultural organizations, such as the Austrian Society for Literature. In 1986 he received an honorary degree from the city of Vienna. He recently was honored by the American Association of Teachers of German.

Fossil expert will discuss 'Eve' theory

Paleoanthropologist Milford Wolpoff will deliver the Phi Beta Kappa/Sigma Xi Lecture at 11 a.m. April 17 in Edison Theatre. A professor of anthropology at the University of Michigan, Wolpoff will discuss "All About Eve. Our Fossil Evidence of Human Evolution." This lecture, part of the Assembly Series, is free and open to the public.

Wolpoff, an expert on human fossils, is a strong critic of the "Eve" theory, which proposes that modern humans all descend from one woman who lived approximately 200,000 years ago, probably in Africa. While he agrees that such a woman might have existed, Wolpoff contends that the evidence cited for her date of origin is inconclusive and ignores contradictory fossil data. For example, Wolpoff notes fossils that show modern humans from a certain geographic area resemble archaic humans who lived in the same area 780,000 years ago.

A member of Sigma XI, Wolpoff also belongs to the American Association of Physical Anthropologists and is an American Anthropological Association Fellow. The lecture, which honors the initiatives of Phi Beta Kappa and Sigma Xi, two academic honoraries at Washington University, is sponsored by the Department of Anthropology, Assembly Series, Phi Beta Kappa, and Sigma XI. For more information about the lecture, call 889-4620.

Washington University faculty and staff make news around the globe.

Washington University faculty and staff make news around the globe. Following is a digest of media coverage they have received during recent weeks for their scholarly activities, research and general expertise.

"In most economic downturns, the overwhelming majority of people go on doing what they are doing and getting paid what they are paid," said Murray Silverman, Ph.D., professor of economics, in a recent Newsweek article about a predicted slump. "It has been a long time since the economy was as bad as it is now. We are out of practice. Overreacting is wrong, but it always happens," he adds.

Did Mrs. Einstein help develop the theory of relativity? Some researchers believe Einstein's letters prove the theory was a joint effort. Clifford M. Will, Ph.D., professor of physics, disagrees. "I don't see that there's any evidence she contributed in the way they claim," he says. The theory is 75 years old, but that hasn't kept scientists from continuing to ask if Einstein was right. Will says the theory is still correct — for now. The story appeared in Science, the Philadelphia Inquirer, Cleveland Plain Dealer, Chicago Sun-Times, Birmingham News, Waukesha Creek (Calif.) Costa Mesa Times, and other smaller papers.

TCHER
LECTURES
Thursday, April 11


PERFORMANCES
Friday, April 12

9 p.m. Performing Arts Series presents Shakespeare’s "Othello." (Also April 15, 18 and 21 at 8 p.m.) 1150 W. Georgia St. $7 for general public; $5 for students. Tickets available at SCSU Bookstore and at door. For more info., call 889-6954.

Thursday, April 11


Friday, April 12


Monday, April 15


CALENDAR
Lectures.

Jose State U. Brown Hall Lounge, Room 218.


Tickets: $15 general public; $8 students and faculty. Both Sun. films can be seen for $4; both Sunday films can be seen for $8. For more info., call 889-6612.

Tuesday, April 16

3:30 p.m. Department of Music presents "A Temple of Texts: Fifty Literary Pillars," through April 15. Special Collections, Olin Library. Hours: 10 a.m.-5 p.m. weekdays; 1-5 p.m. weekends.

Wednesday, April 17

6:15 p.m. Department of Romance Languages and Literatures presents "Les j新品 sortants: A French film with English subtitles," Room 210 Bilby Hall. Free.

Friday, April 19

9:30 a.m. and 12:30 p.m. Filmboard Feature Series presents "The Little Mermaid." (Also April 20 at 2:30 and 7:30 p.m. and April 21 at 7:30 p.m.) Room 100 Brown Hall.

Sports

Thursday, April 11

3:30 p.m. Missouri vs. Kansas City. Steinberg Hall Aud. Free.

Friday, April 12

9:30 a.m. and 12:30 p.m. Filmboard Feature Series presents "The Little Mermaid." (Also April 20 at 2:30 and 7:30 p.m. and April 21 at 7:30 p.m.) Room 100 Brown Hall.

Monday, April 15


Tuesday, April 16

3:30 p.m. Department of Music presents "Spring Student Music Concert," directed by Brooke Carroll. Graham Chapel. Free.

Wednesday, April 17

7 p.m. Department of Music presents "Weill's Billy the Kid," a musical set in the American West. (Also April 18 and 21 at 7 p.m.) Department of Character. "The Seven Samurai," a Japanese film from 1954, directed by Akira Kurosawa. Times, and April 21 at 9:30 p.m.) 100 Brown Hall. $3. For more info., call 650-698-8575.

Thursday, April 18

9:30 a.m. and 12:30 p.m. Filmboard Feature Series presents "Elektra," a Greek film with English subtitles. (Also April 19 and 20 at 9:30 p.m.) Room 100 Brown Hall. $3. For more info., electronic mail to p72245DP at WUVMC.

Friday, April 19

9:30a.m. and 12:30 p.m. Filmboard Feature Series presents "The Little Mermaid." (Also April 20 at 2:30 and 7:30 p.m. and April 21 at 7:30 p.m.) Room 100 Brown Hall.

Midnight, Filmboard Midnight Series Presents "Yellow Submarine." (Also April 20 at 10:30 p.m. and April 21 at 10:30 p.m.) Room 100 Brown Hall.

Sports

Thursday, April 11

3:30 p.m. Missouri vs. Kansas City. Steinberg Hall Aud. Free.

Friday, April 12

9:30 a.m. and 12:30 p.m. Filmboard Feature Series presents "The Little Mermaid." (Also April 20 at 2:30 and 7:30 p.m. and April 21 at 7:30 p.m.) Room 100 Brown Hall.

Monday, April 15